

1 ABSTRACT OF THE DISCLOSURE

2 A physical vapor deposition target includes an alloy of copper and
3 silver, with the silver being present in the alloy at from less than 1.0
4 at% to 0.001 at%. In one implementation, a physical vapor deposition
5 target includes an alloy of copper and silver, with the silver being
6 present in the alloy at from 50 at% to 70 at%. A physical vapor
7 deposition target includes an alloy of copper and tin, with tin being
8 present in the alloy at from less than 1.0 at% to 0.001 at%. In one
9 implementation, a conductive integrated circuit metal alloy interconnection
10 includes an alloy of copper and silver, with the silver being present in
11 the alloy at from less than 1.0 at% to 0.001 at%. A conductive
12 integrated circuit metal alloy interconnection includes an alloy of copper
13 and silver, with the silver being present in the alloy at from 50 at%
14 to 70 at%. A conductive integrated circuit metal alloy interconnection
15 includes an alloy of copper and tin, with tin being present in the alloy
16 at from less than 1.0 at% to 0.001 at%. Other useable copper alloys
17 include an alloy of copper and one or more other elements, the one
18 or more other elements being present in the alloy at a total
19 concentration from less than 1.0 at% to 0.001 at% and being selected
20 from the group consisting of Be, Ca, Sr, Ba, Sc, Y, La, Ce, Pr, Nd,
21 Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Ti, Zr, Hf, Zn, Cd,
22 B, Ga, In, C, Se, Te, V, Nb, Ta, Cr, Mo, W, Mn, Tc, Re, Fe, Ru,
23 Os, Co, Rh, Ni, Pd, Pt, Au, Tl, and Pb. An electroplating anode is
24 formed to comprise one or more of the above alloys.